COOKIA

Journal of the Wellington Shell Club, New Zealand

VOLUME 23, NOVEMBER 2011

NEW ZEALAND SHELL SHOW 2011

CHATHAM ISLANDS

COLOUR VARIATIONS IN NZ SHELLS

AFTER LAND SNAILS IN CUBA

RARE SHELLS FROM SHELL SAND

Editor's Choice

Talochlamys dichroa (Suter, 1909) – Selwyn Bracegirdle collection.

Cookia Volume 23, November 2011

© Wellington Shell Club 2011

ISSN-1171-140X

FRONT COVER PHOTO:
Juvenile *Cookia sulcata* (Lightfoot, 1786)
5-8mm specimens collected in shell sand from Auroa Pt, Mahia Peninsula, New Zealand by Kerry Walton.

Contents

Cookia Volume 23, 2011

	PAGE
NEW ZEALAND SHELL SHOW 12-13 FEBRUARY 2011 collated by Graham Aamodt	2-6
A GOOD WASH-UP ON THE KAPITI COAST by Jenny Raven	7
CHATHAM ISLANDS by Pat Lakeman & Graham Aamodt	8-10
SOME RARE AND UNCOMMON SPECIES FROM SHELL SAND by Mary Agnes Wotton	11-12
RECENT ADDITIONS TO THE CHECKLIST OF MARINE MOLLUSCA FROM WELLINGTON HARBOUR AND APPROACHES by Kerry Walton	12-13
CLUB TRIP TO EAST CAPE AND MAHIA 2011 by Kerry Walton	14-16
RECORD SIZE HALIOTIS VIRGINEA VIRGINEA by Pat Lakeman	16
ANADARA TRAPEZIA by Bert van Tiggele	17
ANADARA TRAPEZIA by Pat Lakeman	17
NOTES ON NEW ZEALAND COLLECTED SPECIES collected by Jenny Raven	18
COLLECTING AT CLAVERLEY by Bev Elliott	19
COLOUR VARIATIONS IN NEW ZEALAND SHELLS by Jenny Raven	20
AFTER LAND SNAILS IN CUBA by Pete Creswell	21-22
NOTES ON BUCCINULIDAE AND BUCCINIDAE by Pat Lakeman	23-26

Editorial

It is with much sadness that I present to you my last *Cookia* as editor.

My hope is that you have found the variety of articles, and the way they have been presented, helpful and informative to your interest in shells and particularly the collecting of New Zealand shells.

Thank you to all those who have provided articles or assistance during my time as editor.

The big event of 2011 for the Wellington Shell Club was the hosting and organising of the New Zealand Shell Show back in February.

It was a commendable effort and probably the most successful Shell Show for Wellington to date. So well done everyone involved.

Many of our club members have hosted meetings during the year for which we are grateful, as we are to Bruce Marshall for visits to the national collection.

As you each continue to make new discoveries finding shells, or understanding more about them, I am sure you will realise the value of being a member of this club and how it helps you with your interest. Thank you to all of you serving the club in an official capacity - the club cannot function without you!

I anticipate enjoying the fruits of others' labours when I read future issues.

Selwyn Bracegirdle

New Zealand Shell Show 12-13 February 2011

collated by Graham Aamodt

The NZ Shell Show was planned for the weekend of the 11 and 12 of February and was held in the Lower Hutt Town Hall. At the same time the Wellington Fuchsia Society combined with the Wellington Begonia Circle and Lower Hutt Horticultural Society held their Flower Show in the adjoining Horticultural Hall.

The following are comments and observations by various people involved with the show. It is hoped that some of these learnings may assist in the set up and running of future NZ Shell Shows.

From the Sheriff of the Show (Graham Aamodt)

Before I give you my take of the show, I would like to tell you of a weird happening – on the Wednesday prior to the show, I woke up with a start after dreaming (I usually don't remember dreams) that there were no tables in the Town Hall as pre-arranged for the Friday set up.

As "Sheriff" of the show, I was responsible to ensure that the venue is set up for the show and receive the people registered for displaying and trading, handing out their envelopes with their display information, and other show information including accommodation, maps and schedule of events. Jenny Raven compiled the registration envelopes with all the details that the 35 exhibitors needed - and not one of these was wrong. I was also available to answer any queries during the show and help out as needed, especially for transport to and from motels, restaurant and other places.

Some four weeks prior to the show, I booked 55 display tables (2.5m x 0.75m) to accommodate the 191 various displays. Note here that the linear metres for the displays totalled some 84m and this included an extra

10% for contingency space. Putting displays on the floor was just not an option!

Set up

I had planned to get to the Hall by 8.30am on the Friday morning and organise helpers to set up the tables for displays and sellers ready for the weekend show. At around 8am I received a text from Jenny Walton, from the Hall, telling me that the neighbours (those plant people) had taken some of our tables without booking and that the hall custodian and Jenny had put them back into our adjoining hall.

Well you can imagine what I was thinking – yes, why can't I dream of those 6 little numbered balls.

Anyway Pat and I quickly arrived at the Hall and confirmed with the custodian that the tables were indeed ours, as booked, and that the cheeky neighbours would need to make other arrangements.

We (myself, Pat Lakeman, Jenny Walton, Kris and Roger Woods, Jill Burnet, Selwyn Bracegirdle, Derrick Crosby) quickly set up the tables following a measured plan of the Hall and table layout (created on AutoCAD) and placed the class labels at the lengths based on the registered display box sizes. Once the dealer and shell club sales tables were up, we decorated the entrance with posters and other shell related bits and pieces. I must say I thought the Hall looked great, and was ready for exhibits.

From about 11am exhibitors started arriving and setting up their displays on the prescribed tables as per the Hall layout plan.

The only problem encountered during set up was a tightening of space for a few classes as a few large displays were set up as landscape instead of the portrait format that exhibitors registered. For future shows this aspect will need to be clarified. As we had ample space to shift things along, we were not terribly inconvenienced, but other venues may be more restricted. With a little shuffling of displays, I managed to fit everything in - here the single specimen class was a godsend as this gave lots of extra space when displays were doubled or even tripled up on the tables. Another item for future shows is to allow extra linear space for the class signs.

Judging

All of the displays were up by 6pm in time for judging and they looked fabulous – see the various photos following. Prior to judging, the judges (Bruce, Hamish, Ena, Daphne, Robert, Fred, Claire, and Derrick) and helpers partook of some food and refreshment – thank you Pat, Jenny W, and Kerry. For the next three hours or so, the exhibits were judged in terms of their class criteria. At the time it was

remarked by many of the judges that the exhibits were difficult to judge due to the high quality of many of the them. The judges did a fabulous job and we are very grateful for them to give up their precious time for this event.

Public

The next day (Saturday) the Hall was open to the public from 9am to 5pm. After checking out the winners and the grinners (despite being a novice, I gained a 1st in an Open class), and making sure all was order, I set up publicity sandwich boards with fantastic posters produced by Selwyn, and placed one near the entrance to the Dowse Gallery across the road, and one right outside our venue. It is fair to say that we were not stampeded in the rush by the public to get in; though there were 3 or 4 people queued up just prior to opening the main doors.

Over the next couple of days we had a steady stream of people - quite a few of these were also carrying plants from next door - and generally they seemed very pleased with the displays and the goods for sale. We had a number of raffles for sale and these also were well patronised. Talking to some of the sellers, I got the impression that they were also pleased with how things went and some sold a lot of their shells.

Auction and Awards Ceremony

On the Saturday night the club held an auction for various shells, some of which were very rare and attracted spirited bidding. Yours truly was given the role of Auctioneer and I must say that it went quite smoothly, with the club and other sellers doing pretty well, I think.

After the Auction, our President, Jenny Raven gave a speech and handed out various trophies and certificates to the winners and runners up for the show exhibits as judged by the judges. The exhibitor's choice was also handed out at this time. As the show still had a day to go the public's choice would not be known until after the show closed.

This was then followed by a mega raffle ran by Kris with many lots available for those lucky enough to have their number drawn. The raffle was run on the basis of the first number out had the first choice of all of the lots. This process continued until all of the lots were gone. A lot of fun was had and the event was most enjoyable.

The Saturday night meal.

Dinner

Following the awards, a nice dinner was held at the Jackson Café, Petone with around 40 people attending. We enjoyed an excellent meal, though it must be said that the service was a tad slow - maybe a ploy to get more drinks in?

After the Show

Once the doors were shut it was time to take down the exhibits, pack away the tables, clear the walls, collect the posters and sandwich boards etc. Thanks to everyone that helped with this - there are too many to mention here, but my special thanks go to Derrick, Jenny W, Kerry and Jill. With all the people helping we cleared the Hall within about 2 hours.

It was great to catch up with lots of people during the show from far and wide, but it was sad to farewell some that were not staying on to gather at Jenny Raven's house the next day.

I believe the show was a great success and this outcome was due to the fine contributions made by the committee, club members and others who helped out on the two days of the show.

My thanks to you all.

From the Secretary, and a Seller/Buyer, perspective (Kerry Walton)

As a new member of the Wellington Shell Club Committee at the start of this year, I quickly realised how much work actually went in behind the scenes towards running a successful Shell Show. I was in charge of the design of the certificates and the very large club information board, amongst other things. This, whilst making sure that my exhibits were presentable and the material for my sales table was suitably displayed, labelled and priced.

This was something I had never tried before but, by selling quality shells, common though most were, I managed

The prize winners.

to clear out nearly everything I had brought with me on the first day of the Show, selling to dealers, collectors and the public alike. By doing so, I was able to spend big (for me!) at the auction and on the other tables yet still leave on the Sunday with more money in my pocket than before the Show, not to mention the beautiful shells that I had purchased with some of my earnings.

A big thanks to Pat Lakeman for her help with my sales table and to Mike Young for giving me a handful of shells which helped splendidly. I 'll leave the 'thanks' there as there is a considerable list of people who have done a lot of hours to make the Show work, from judges, committee members and their helpers, to exhibitors, and I am sure they'll get mentioned elsewhere.

Having a table enabled me to do a lot of talking which, as Secretary, seemed quite important. I answered a large number of enquiries regarding the Club, shells in general and what started my interest and in doing so, gained us a couple of new members.

This year I found that the quality of displays was especially impressive, and that also helped to make the Show what it was, along with a great attendance from our sister Clubs in Auckland, Whangarei and across the ditch.

Thank you all for your efforts, I hope you all enjoyed it as much as I.

From a Judge's Angle (Derrick Crosby)

Once upon a time it was a great honour to be asked to be a Judge at a shell show. Thus it was with some trepidation that I accepted the invitation this time. What a most difficult task it proved to be.

Over the years each shell show has become better and better, and this show presented by the Wellington Shell Club was as good as it gets. The standard of the shells exhibited was impeccable, the presentation just as good, and to make it more difficult, there has been an increasing lift in the artistic presentation of the entries. Thus from a judges perspective it really was a case of very small nit picking to determine a winner.

The Wellington Shell Club organising committee.

Fortunately the show organisers had provided good criteria and guide lines on which scoring and judging was to be based. In consideration of the all up excellence of displays, it often came down to the appearance of the entry that was the final determining factor. In many cases a small error in one part of a display was offset by excellence in another.

I was fortunate to have Robert Ellis as a co judge for the classes we were asked to judge and we worked together well. I can't even begin to imagine the difficulties that Bruce and Hamish experienced trying to sort out the New Zealand entries.

All together a challenging task, but very satisfying. We are privileged to be able to participate in this way.

From the Treasurer (Jenny Walton)

I played 2 roles at the show as the Treasurer and as a committee member. As a result I felt I had too much to do, so got a bit stressed about it all. For future shows, I recommend that the Treasurer is left with only that job when you are running a show, raffles and auction. All running around with printing etc should be done by another club member and it doesn't have to be a committee member.

Prior to the event I set up a spreadsheet to record the results of the auction.

During the event, I sorted out the cash floats, received and wrote receipts for payments for tables, auction, subscriptions, extras and show income.

After the event, I needed to count and bank the money received, create a final statement of the result and get receipts from people that purchased bits and pieces related to the show to finalise the results.

As theTreasurer I found that I was in constant demand, where others could pop out every now and then I needed to be available. This is not necessarily an issue as long as the Treasurer is only doing this job and not numerous other jobs as well.

As a Committee member

Prior to event I set up a spreadsheet to catch the registrations and results of the judging.

I recorded registrations, arranged for a dinner venue and the bookings for the meal.

I also dealt with Lower Hutt City Council officials for booking the Town Hall and put out lots of posters publicising the Shell Show.

On the Friday of the Show, I helped with Hall set up, and stayed for the judging to record the results as they came in. After the judging I created labels for the various paua trophies. I also assisted Kerry in double checking the certificates, helped him with the Shell Show display board content (prepared by Kerry).

During the event, I printed out the paua shell labels, cut and glued labels onto the trophies, printed out the certificates and cut them to size and printed out the results for judging and the auction.

After event I helped with the dismantling of the exhibit tables and general clean up of the Hall.

Over the next few days I finalised bond matters with council, updated the Wellington Shell Club website, contacted new and potential members with Kerry and updated the contact list with new members.

From The Club Sales Tables - From Jill Burnet.....

When it became apparent that nothing could deflect our club from holding a shell show in 2011, I had a truly brilliant idea – I would go through my collection and RUTHLESSLY weed out all the spares for the club sales table. Well you all know where good intentions lead to; I made a great start, but I didn't get anywhere near through my collection, even with a revised plan of concentrating on those species most useful for craft sales – somehow, I found myself with the task of organising the stock for the sales table aimed at sales to the general public and craft worker. Luckily, I didn't have to rely just on my own shells – a call in the newsletter brought in boxes and bags of shells at every meeting, not to mention baskets, ribbons, plastic bags and books. Items arrived by post,

Jill Burnet (right) at the club's sales table.

Graphic using New Zealand shells to promote the Shell Show.

offerings were left on my doorstep, and pressed into my hand. Club members responded magnificently, and I started to feel overwhelmed, as I sorted the shells roughly according to size, shape and colour. By Christmas, I had filled several shopping bags with books, a box with shell and sea theme ornaments, and the break from my usual activities provided a good time to line up the baskets and put a tentative arrangement of shells in each. More shells arrived and arrangements got changed but all too soon it was time to stop tweaking, cover the baskets with cellophane and price them. Smaller shells were used to fill bottles, what was left after that was put into clear plastic bags. I hauled my posters and calendar pictures out of storage, packed a kit of useful items such as pens, paper, blu-tack, squashed in a lunch, loaded up my biggest sports bag and was ready to go.

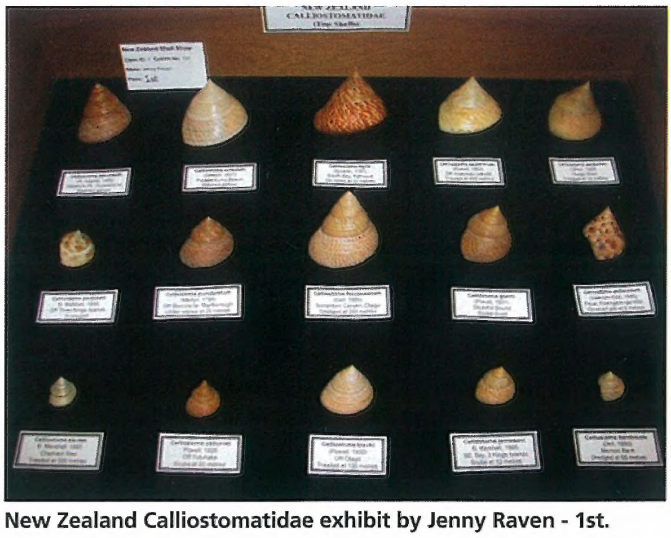
The set up swung along at a good pace, a bare hall transformed into an exhibition in a few hours, and what a great exhibition – all the entries seemed to me to be of a very high standard. I spent most of the weekend behind the 'craft' sales table, watching over my baskets and bottles and books to see how they sold. It was also a good place to see people coming in – I chatted with ex-members Barbara Meads and John Little, and was able to bring together Lesley Barnes and Heather Smith so that they could continue an edifying discussion on fossilised crap. As soon as we closed the doors on the public on Saturday afternoon, I sat down to count the exhibitor's choice votes – there wasn't much in it, with Andrew Crosby's very innovative exhibit in the scientific and educational class coming a close second to Pat Lakeman's Worldwide 4 Families display. Counting the public choice votes on Sunday evening took a lot longer, a job requiring hot drinks and sustenance to help it along. I realised that there was no clear winner – the votes were spread over many classes and exhibits. Particularly popular were 'Shells with a story', 'Most colourful display', 'Shells of one colour', 'World wide muricidae', the displays of very large shells in 'Favourite shells' and 'Shells over 200mm'. But the runner-up came from the 'Land, Freshwater or Fossil' class, Heather Smith's entry, and just ahead was the winner, Graham Aamodt's display of Xenophoridae.

I was up bright and early on Monday morning, though not quite so bright and early as I had intended, and off to the engravers with the two cups. At Jenny's place several people (one of whom was Graham Aamodt who felt that the sheriff had special privileges), tried to find out who the public choice winner was. I was laughing inside myself, but I think I managed to keep a straight face as I resisted all attempts to pump me. I didn't see Graham's face as I read out the results, but I heard him say "You're kidding" in a tone of disbelief. The congratulations that followed ended the shell show functions on a high note.

.....And from Kris Woods

On the Saturday morning of the show two visitors were happily sorting through the shells on the club sales table. One said to the other "oh wow, there are a lot of lovely shells here". She was quite right and many similar comments were made over the weekend. The comments alone made this show's sales table the most successful I have been involved with.

Cassidae exhibit by Pat Lakeman.



New Zealand Calliostomatidae exhibit by Jenny Raven - 1st.

Like any successful aspect of the show, the preparation beforehand is the key to success. Since 2007, when Wellington hosted the last show, the sales table had grown considerably. There had been concerted effort from club members to contribute foreign and New Zealand shells over this time and slowly but surely the number of shells grew. I steadily chipped away at preparing them for sale, bagging, cleaning and oiling. The sales table grew immensely with donations of ex-members shell collections. I knew we had to have plenty of material to sell and we achieved that. The committee came together several times to sort through these collections. This certainly made my job a lot easier when it came to the final sort out for the show.

Several other factors contributed to the sales table success. There was plenty of table space, a simple but effective pricing system, prices were neither too high nor too low and Jill had organised a group of hard-working club members to man the table.

Lastly, what more can you ask for, than to see club members returning repeatedly to the sales table over the weekend, to discover new treasures!

And Finally From the President (Jenny Raven)

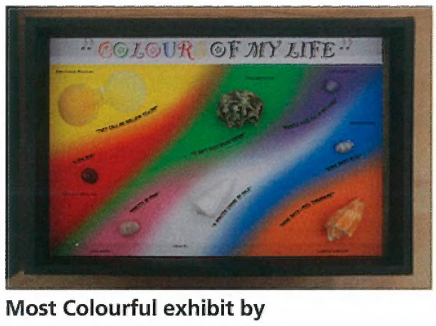
As President and Chairperson of the show committee the day of our shell show approaches with some trepidation. The Club has previously hosted three of these so it should not be a problem and indeed it isn't.

The important thing is to complete most work ahead and utilise resources and templates that worked last time. The week before the show is a blur of exhibit and show preparation. Everyone appears prepared and the day arrives. Time flies during set up. It is amazing how in a few hours the hall is transformed. Judging follows and this goes well thanks to Jenny Walton's new computerised marking system. Due to the high quality of the displays, the judges had a hard job in deciding the best ones, with only one or two points in many classes deciding the winner.

Saturday and the public follow. As president, lots of people want to talk to you - visitors and current members from out of town, even new members to meet - all of this makes a shell show worthwhile. However there is still work to be done - some of our new systems have created more work on the day - a note to learn from for next time and late in the afternoon Pat and I find ourselves in the supermarket buying supplies for the evening function.

Prize giving and the auction follow with a speech from me - I hope that all the certificates and cups are in the right order. Lastly the dinner provides a chance to relax then suddenly it's Sunday - I have some items for the exhibitor trading session in the morning - then at last some time to really look at those exhibits - today is much more relaxed for all - even time for lunch across the road in the sun.

Favourite Shells exhibit by Mary Agnes Wotton - 1st.



Most Colourful exhibit by Carol Bracegirdle - 1st.

Variations on a NZ species by Selwyn Bracegirdle - 2nd.

Finally we pack up but I am hosting the usual Monday party for everyone at my house. A rush to tidy up the house then lots of fun. Suddenly it's over for 4 more years. The financial figures are out - we have several new members and made a profit - thank goodness for the auction making lots of money, but more especially every committee member, exhibitor, judge and helper - all of whom generously donated their time and effort to make this show particularly successful.

A Good Wash-up on the Kapiti Coast

by Jenny Raven

On the weekend of 14 / 15 May the weather map warned that very strong westerly to south westerly winds were to hit the Wellington area. This was the first good south westerly in a long time. That weekend it blew and rained continuously from the west. On Tuesday I decided I would check the west coast beaches for shell wash-ups and took a half day's leave from work. It was low tide when I reached the coast at Paraparaumu but the sea was hitting the dunes and I could hardly stand in the very strong wind. There were no shells to be seen – a wasted half day.

Gradually the winds abated during the rest of the week. On Saturday I wondered if the calmer conditions might have dropped off some shells and again set off for the coast. There were still no shells at Paraparaumu but across the river at Waikanae it looked different. There was some driftwood washed in and I could just make out what I thought were shells amongst it so it was back in the car for the drive round to Waikanae.

Yes there were shells there - the quantity of wash-up was not great but this was a wash-up like no other I had experienced. The first find was an *Alcithoe fusus* – normally an occasional one is found but this time there was another…and another…and another. About 30 were collected that day. Interspersed with the *fusus* were several *Zeacolpus vittatus,* a few *Aeneator otagoensis* and *Muricopsis octogonus,* 2 *Cominella elegantula* and a large, but holed *Coluzea spiralis* - all rare finds for the Kapiti Coast although most can be dredged from deeper water off the Marlborough Sounds.

Zeacolpus vittatus has only recently been turning up at Waikanae and *Cominella elegantula* had not been recorded in the Shell Club records from this coastline before, although it is not uncommon as a fossil further north at Wanganui – the two I found had definite

Wash-up Waikawa Beach.

colour and faint stripes. One *octogonus* was perfect – unusual for this area. Whilst the wash-up was concentrated in one area, shells continued to be washed in intermittently all along Waikanae beach to the stream at the north end. All were dead although some contained hermit crabs. It looked like they had travelled together for some distance - many were stained black or were rusty, almost all had slipper limpets (*Maoricrypta sodalis*) inside the aperture and also housed a large pink centipede which crawled out after a few days. Two *Alcithoe fusus* carried *Maoricrypta youngi,* on their backs – another unusual find on this coastline.

Cominella elegantula

Muricopsis octogonus

After this I was still keen for more and next week visited Waikanae and Waikawa beaches – not much was left at Waikanae but at Waikawa there were signs of a good wash-up on the northern side of the river mouth. Here there were large, quality, *Alcithoe arabica; Calliostoma selectum, Semicassis pyrum* and surprisingly another small but whole *Coluzea spiralis*. A week later I found a perfect *Resania lanceolata* and several *Calliostoma selectum* at MacKay's Crossing. This beach had been so bare in recent years I had been avoiding it. Two weeks later all signs of the washup had gone. In July however, the westerly winds came back and Waikawa again had a good washup of quality *pyrums, arabica* and a few *fusus*; this time the wash-up was on the south side of the river. All in all these wash-ups provided a good pastime and exercise for me through the colder winter months.

Chatham Islands 4-15 April 2011

by Pat Lakeman and Graham Aamodt

Key facts

The Chatham Islands are 800km east of the South Island of NZ, on about the same latitude as Christchurch. It is a group of ten small islands, called Rekohu (meaning 'misty skies') by the Moriori people, and the two largest islands are inhabited: the main Chatham Island – about 90 sq km - and Pitt Island. About 750 people live there and the economic base is fishing, pastoral farming, tourism. It is the ancestral home of the Moriori people; by complete chance it is the first inhabited land in the world to greet the first dawn; and it has unique flora and fauna which is the key attraction for shell collectors.

There is some basic information about how to get there and where to stay etc at the end of this story – it is a wonderful place for a holiday as long as you know what to expect and that includes weather that is very variable, and often windy.

Things to do at the Chathams

Well, look for shells, of course – that has brought Pat back for the fourth time now. But it was Graham's first visit, and our holiday was not just a shelling trip. We did the tourist things also:

Coast to west of Kaingaroa.

- the statue of Tommy Solomon, the last full blooded Moriori who died in 1933;
- the basalt rock formations on the north coast of Petre Bay on the road to Port Hutt;
- the old stone cottage built by German Moravian missionaries in 1872 on the northern coast at Maunganui (on the road to Waitangi West, beyond Port Hutt);
- exploring walkways and picnic areas on the north coast near Taupeka Point;
- Hapupu Reserve where there are dendroglyphs (tree carvings) carved by Moriori on the kopi (karaka) trees.

Plus Pat did some walks to photograph endemic fauna, and Graham (successfully) hunted shark teeth in the lagoon at Blind Jim's Creek. Graham also went fishing and was really too successful at this – his large moki caught from the Kaingaroa wharf gave us heaps to eat even though we gave half to a neighbour, so Graham couldn't go fishing again for fear of catching too much fish!

Shells from west of Kaingaroa, Waitangi and Taupeka Point.

One thing to note about Chatham Islands attractions now is that permission is required to do things that were freely available before. There is a charge to get through the (new) gate to the basalt columns; a charge to see the stone cottage (which is actively being restored); a charge to drive out to Point Munning and, despite asking in advance, we were refused permission to use a private road to access Matarakau.

Shells from Owenga.

Shells

Club members have been good at keeping lists of shells found on trips to the Chatham Islands and these have been published in *Cookia*. I don't think I have anything from this trip to add to past lists but I did re-read them – it helps to know what to look for and this is especially true for the Chatham Islands because not only are some species unique there, but also some 'common' species are absent (so far!) – for example *Lunella smaragdus* is absent but its close relative *Modelia granosa* is relatively common; the only species of *Cellana* limpet found there is the subspecies *Cellana strigilis chathamensis*; the species of *Calliostoma* found there that looks like *C. punctulatum* is *C. granti*; the volute *Alcithoe arabica* is absent but the volute that can be found there (though not common as a wash up) is *Alcithoe wilsonae wilsonae*. Given the right conditions, shell collecting at the Chathams can be very exciting.

Unfortunately, that was not the case for us on this trip! It was a bit disappointing from a shelling perspective, compared to Pat's earlier visits. The weather in the first few days at Waitangi and Owenga was pretty dreadful – Pat's trip diary records one day of "horridzontal" rain and howling wind when we didn't go outside at all. And it describes another as "bleak to appalling". Although the weather did improve (some lovely sunny days when we were at Kaingaroa), the downside for shell collecting was a very high sea swell, which more or less negated the low tides. For those who have been there, in practical terms this meant

- no exposed rock platform just beyond the Waitangi wharf where there is usually shell sand and plentiful live *Cellana strigilis chathamensis*;
- rocks in Port Hutt harbour beyond the end of the road were barely visible;
- the flat rocky area off the end of Kaingaroa road where (legal size) paua were once just ankle deep was knee to thigh deep. Though we did collect a dozen legal paua here (smaller paua were plentiful), it was

Shells at Taupeka Point.

hard to find them and achingly cold work.

So nearly all of the shells we collected were wash up material. Our collecting spots were:

Owenga

- Quite a lot of material but not a lot fresh; serious lack of *Haliotis virginea morioria* despite both of us searching diligently;
- In the rocks near Gillespie's Stream at the southern end of Hanson Bay there were a lot of fresh *Cominella nassoides iredalei*. I collected a lot in a serious search in the water for any with a live animal in (found once before) but no luck despite getting very wet and cold;
- Also in the Gillespie's Stream area, quite a lot of good *Gari convexa* including some nice white specimens; and
- A large and strangely blue *Cellana strigilis chathamensis* was an unusual find.

Waitangi, southern end of Petre Bay near road bridge

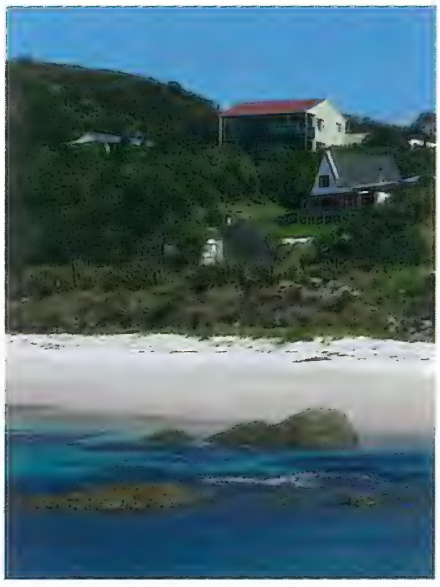
- A good variety of shells often found here in small area; and
- Very bare of shells to north of this area on Petre Bay.

Taupeka Point

- A star find here, record size (just!) *Haliotis virginea morioria* and in very fine condition;
- Millions of shells washed up but not fresh – dominated by *Cookia sulcata*, blue ribbed mussel, *Haliotis australis* and tuatua;
- Found a nice *Talochlamys gemmulata* in sponge; and
- Tantalising pieces of *Alcithoe wilsonae wilsonae* but no whole specimens.

Beaches east of Kaingaroa (towards Matarakau)

- A very long walk along the beaches and over bluffs to more beaches – very isolated, beautiful and pristine, we stopped for lunch after about 3 hours walking; and



Our red-roofed accommodation Ultimate Hideaway at Kaingaroa.

- Beaches fairly bare except for a few small wash up areas and we found a few more *Haliotis virginea morioria* here, with the best right at the end of our walk.

The basics

You can get there flying Air Chathams, from Auckland, Wellington or Christchurch, and it is never cheap! The best fare from Wellington (bought well in advance) during April 2011 was $728 return, with flights on Mondays and Fridays, the trip taking about 2 hours. There is a hotel and motel at Waitangi, a lodge on Petre Bay further north past Te One, and several backpacker houses, homestays and holiday homes to rent at Waitangi and Kaingaroa. You really must sort out accommodation before you arrive.

We stayed first at a backpacker house inland at Waitangi, sharing it with three marine surveyors who were mapping Pitt Strait and a local electrician who was waiting for his portacom house to be finished. After 5 nights we moved north to Kaingaroa, staying at the Ultimate Hideaway owned by Kath and Ross Morrison. Pat had stayed here on her last visit in October 2007 with Jenny Raven, Bert van Tiggele, Doreen Burr and Doug Hicks. It is a fantastic place to stay and we also hired our rental car from Kath and Ross. The Morrisons also own one of the two shops and we were able to order groceries in the weekly delivery, also Bluff oysters!

Our time at the Chathams was the quiet season for locals because March and April are closed for commercial crayfishing and many locals go off island for a break. Kaingaroa in particular was quiet, not least because the fish factory there had closed and catches are now trucked south to Waitangi.

Taupeka Point looking east.

Some Rare and Uncommon Species from Shell Sand

by Mary Agnes Wotton

Collecting shell sand is an easy process but sorting and identifying specimens collected in this way takes some time so it was a very long while after going through sand from Matai Bay and Spirits Bay , Northland and from Cable Bay on Urupukapuka Island in the Bay of Islands, that I discovered I had found some rare and uncommon species. Most are restricted to the Aupourian Province.

The first of these, *Naricava neozelanica* Powell, 1940, a rare endemic species, came from Matai Bay sand collected in 1989. In the Key to New Zealand Mollusca it is placed in the family Vanikoridae, a family of small to medium, unusual gastropods and is the sole member of this genus in New Zealand. There are 5 species of the genus in Australia and two recently named in West Africa by Rolan and Rubio, 2002. Powell placed *Naricava* in the family Tornidae where it seems to have remained on most databases including the OBIS Indo-Pacific Database, except in Australia and New Zealand.

Naricava neozelanica

The genus Naricava was introduced by Hedley in 1913 for an Australian species *Adeorbis angasi* A. Adams & Angas.

In November 2006 on a collecting trip to Northland and the Bay of Islands with Jenny Raven and Pat Lakeman, shell sand collected at Spirits Bay from the small island near the campsite, yielded another rare species, *Zelippistes benhami* (Suter, 1902) again being the sole New Zealand representative of this genus in the family Capulidae.

Zelippistes benhami

Powell placed it in the family Trichotropidae as did Cotton but *Zelippistes* became a synonym of four Australian species and one from the Gulf of Arabia, all of which are placed in the genus *Lippistes*, the genus *Zelippistes* being confined to New Zealand.

Munditia tryphenensis (Powell, 1926), an uncommon species of the family Liotidae, was found in both Spirits Bay and Cable Bay shell sand in 2006.

Mundita tryphenensis

This genus of small umbilicate discoid shells is well represented in New Zealand with 9 species. Originally described by Powell as *Liotina tryphenensis*, Finlay proposed a new genus *Munditia* for this species and in conjunction with it, *Liotia serrata* Suter and *Liotia suteri* Mestayer as none of the named groups "exactly suits the majority of temperate Australian and Neozelanic *Liotias*". Four species are found in Australia - one in New South Wales, the rest limited to Victoria, South Australia, Tasmania and South West Australia, one from Argentina and the remaining named species from the Falklands, South Orkney and South Shetland Islands.

Five species of Columbellidae came from Spirits Bay – the rare *Macrozafra mariae* Powell, 1940 and the uncommon *Aoteatilia larochei* Powell, 1940 (also from Matai Bay), *Liratilia compta* Powell, 1930, *Liratilia conquisita* (Suter, 1907), *Liratilia subnodosa* Powell, 1934, while *Macrozafra enwrighti* Powell, 1940 came from Matai Bay. The Columbellidae are a large family of numerous genera and many species worldwide. They are abundant in warm and tropical waters but also in the temperate waters of New Zealand and Australia. This family has many unnamed species in New Zealand and within my own collection there are several from shell sand still unidentified.

Macrozaphra enwrighti

In tropical countries small Columbellidae species are found under rocks and small stones as well as from algae. So far the only live member of this family that I have found in New Zealand is *Paxula paxillus* (Murdoch, 1905) under stones at Island Bay.

From the family Clathurellidae, Cable Bay finds were the rare *Tomopleura multiplex* (Webster, 1906) a small white shell with interesting sculpture and the uncommon *Tomopleura albula* (Hutton, 1874), a pale orange-coloured shell

similar in appearance to *T. multiplex* but with a more squat body whorl.

Tomopleura multiplex

This is not a large genus. South Africa appears to have the most species followed by Australia with others spread between New Zealand, Japan, the Red Sea and India. Some sources have placed this genus in the family Drilliidae or the Turrid subfamily Borsoniinae.

Phyllocoma (Galfridus) speciosa virginalis (Suter, 1913), the last of the uncommon species, was a Cable Bay find from the family Muricidae.

Phyllocoma speciosa virginalis

This is probably the largest of all the previously mentioned species with an average height of 16mm. Galfridus is a subgenus with few species, the rest being from Australia.

The island at Spirits Bay is familiar to many but Cable Bay on Urupukapuka Island is not visited as much as it is accessible only by ferry or tour boat from Russell/Paihia. This island is known as Zane Grey's Island as the famous western writer visited it many times for big game fishing. From the boat dock, one has to hike over undulating hills with lovely views then drop down to Cable Bay where there is a camping area with toilet facilities, set back from the small white sand beach.

On my first visit in November 2006, I spent many hours lying on the beach sifting through the low ridge of sand above the high tide mark, retrieving small species while Pat and Jenny fossicked in the bay as the tide was out. The finds were very exciting but an April 2011 visit to the same place was most disappointing as the wonderful shell sand from the first visit was replaced by hundreds of small pebbles with very little shell sand which is still waiting to be sorted!

References:

COTTON, B.C. 1959: South Australian Mollusca

FINLAY, H.J. 1927: A Further Commentary on New Zealand Molluscan Systematics Transactions and Proceedings of the Royal Society of New Zealand, Vol. 57, pp. 320-485

POWELL, A.W.B. 1940: The Marine Mollusca of the Aupourian Province, New Zealand Transactions and Proceedings of the Royal Society of New Zealand, Vol. 70: 3 pp. 205-248

POWELL. A.W.B. 1979: New Zealand Mollusca

RAVEN, J. & BRACEGIRDLE, S. 2010: New Zealand Seashells Visual Guide

ROLAN, E and RUBIO, F 2002: The Family Tornidae (Gastropoda, Rissoidea) in the East Atlantic. Suplemento Resenas Malacologicas XIII. Spain

Recent additions to the Checklist of Marine Mollusca from Wellington Harbour and Approaches by Kerry Walton

The range of molluscan habitats encompassed within the Wellington Harbour area is very large resulting in a large range of species within the fauna that we find there. A list detailing these species was compiled in 1998 by Bruce Marshall at Te Papa and other lists of mollusc species from the Wellington region have been compiled and maintained by the Club over the years. These can be found in the June 2003 Special Issue Cookia journal.

I add here some new records not found on any of these lists, brief notes on how these species have been collected and speculation on their method of arrival into Wellington's waters.

1. Limidae

Limaria orientalis (A. Adams & Reeve, 1850)

I have collected four live specimens in a single dredging run off Scorching Bay in April, 2011. This is a species believed to have been reintroduced to New Zealand in the early 1970's either

naturally via planktonic movement in ocean currents (likely from Queensland which is the nearest part of its natural recent range) or within the bilges of cargo vessels. As the species is most commonly found in or near harbour areas (where most shipping ports are), this theory seems most likely. Shells of this species have been found in Nukumaruan (1.96-1.1 mya) fossil beds around the country (Beu, 2004). The possibility exists that the species never died out in New Zealand although no specimens from intermediate dates are known so it seems unlikely. The species is now fairly widespread, occurring commonly off Tasman Bay, Nelson, Golden Bay, the Marlborough Sounds and in parts of Auckland to name but a few. That the species could find its way from one of these areas into Wellington Harbour seems hardly surprising. When however is harder to say as detailed dredging records for the Harbour are few and far between. As it has turned up in only one of my six dredging stations, it is entirely possible that the species has been here for a while undiscovered, not washing ashore due to the calmer waters of the Harbour, and not being discovered due to very little dredging activity looking for molluscs and an apparently sporadic in-harbour distribution.

2. Architectonicidae

Philippia lutea (Lamarck, 1822)

This predominantly northern (in New Zealand) species is known in the Wellington region from shell fragments found along the Wairarapa coast but the single large intact specimen (shell only) found on Eastbourne Beach in 2001 is a new record for Wellington and the species. Jenny Raven has since found a broken piece at Owhiro Bay. Most likely this shell originated from a rogue planktonic larva that survived outside of the species' normal New Zealand range and it is also likely that no living examples of this species exist further south along the North Island's east coast than Wairarapa or even Mahia (B. Marshall 2011 Pers.Comm), a well-known location for them. As a point for those interested, there are two quite morphologically and geographically distinct populations of this species in the country. One, the well-known northern distribution stretching as far south as Mahia and Wairarapa, and a second small colony living in deeper water off Fiordland. Morphologically the Fiordland shells are quite distinct as they are pale, have much higher spires and attain a greater size (Beu, 2011).

3. Fissurellidae

Tugali elegans Gray, 1843

This is by no means a new record for Wellington as this species has been dredged dead just inside the Harbour entrance and is recorded commonly beached (shell only) along the South Coast. It isn't however on the existing lists so far as I can see – likely just oversights. So I mention it here.

4. Calliostomatidae

Calliostoma pellucidum (Valenciennes, 1846)

This species has been recorded quite frequently in recent times beached along the Kapiti Coast and is known from Marfells Beach in Marlborough but not until now from the harbour area or approaches that I know of and it does not feature on the existing lists. I add it now based on a single juvenile specimen taken live in shell rubble at 15m off Scorching Bay. This species could easily have been here for quite some time and again, simply overlooked or just not discovered as it is not so common in the area and perhaps (?) favours a slightly rocky environment here mostly unsuitable for dredging.

5. Nuculanidae

Poroleda lanceolata (Hutton, 1885)

A single specimen of this small, delicate and uncommon bivalve has been dredged live in mud off Scorching Bay making it a new record for the harbour. As only one shell has been found sieving through over $2m^3$ of mud taken from my 6 stations it is obviously uncommon in the Harbour making its absence from the list no surprise at all.

I feel confident that continued shell-interest and exploration will result in many more records being added to these lists in the coming years. I have for example dredged single valves of an undescribed *Mysella* species in the Harbour and an undescribed *Nucula*/*Pronucula*? species that seems not uncommon at all. So there is much more yet to discover out there!

References:

Beu, A. G. 2004. Marine Mollusca of oxygen isotope stages of the last 2 million years in New Zealand. Part 1: Revised generic positions and recognition of warm-water and cool-water migrants

Beu, A. G. 2011. Marine Mollusca of isotope stages of the last 2 million years in New Zealand. Part 4. Gastropoda (Ptenoglossa, Neogastropoda, Herterobranchia)

Cookia Volume 14, Special Issue: The Wellington Shell Club Lists, June 2003

Marshall, B. A. 1998. Marine Mollusca from Wellington Harbour & Approaches

Club Trip to East Cape and Mahia 2011

by Kerry Walton

Leaving Wellington for Whakatane first thing Saturday morning with Jenny Raven, the weather was good for little else but driving. It did however mean that there were few cars on the road making for a more pleasant trip. Along the way we met up with Jenny's friend Craig Rickit and drove in convoy. In Whakatane I was fortunate enough to be staying with Derrick and Ann Crosby and spent quite a few hours that night viewing their very impressive collection.

Our first day was fine much to the discredit of the weather men and we met up with the others on the trip at the Western end of Ohope beach for our first fossick together. The wash-ups were fairly poor but I collected (and ended up giving away) some live *Diloma coracina* and *Taron dubius* on the low tide rocks; both species that I cannot help but pick up when I see them in good condition.

The majority of the shells washed up were very large specimens of *Dosinia anus*, a couple of which I picked up as I wasn't at all sure that I had any in my collection at all. Indeed I hadn't as it is such a common shell I had never thought to pick it up before. This sort of set a trend for my collecting on this trip and maybe half of the material I picked up could be found without any difficulty on Wellington beaches including good specimens of shells such as pipi and tuatua.

Derrick and I walked over the headland to Otarawaiwere Bay where I picked up a large but worn *Semicassis labiata* in the high tide drift. There was little else there though so we walked back with the club members who had come across after us.

The next day I drove with the Crosbys to Waihau Bay where I received a full guided tour along the way. We stopped at a small point just South of Te Kaha where Derrick and I had a quick look around. There were many fragments of beautifully red *Charonia lampas* and Derrick picked up a *Cantharidus opalus* that was polished so as to be iridescent all over. We then caught up with Jim and Leigh Crossland, Jenny and Bert Van Tiggele, Jenny Raven and Craig Rickit at Te Kaha where we stopped to have lunch. Derrick braved the freezing wind to walk to both ends of the beach there but finding only a discarded piece of rope. Driving on, we took a quick tiki-tour of the Waihau Bay settlement which was just off the main road. Then, heading off to the campsite just another kilometre or two further down the road, we passed what looked to me very much like a turtle sitting on a roadside sand-dune. Reflecting on a news article about turtles in Northland that we had heard the night before, I made a comment to Derrick who promptly slammed on the brakes and turned around to have a look. It wasn't a turtle and I never really thought it would be but I'm very pleased we checked none the less as it would have bugged me the whole trip otherwise.

A minute later we pulled into the campground to get directions to the house Jenny had booked for us all.

It suited us brilliantly; large, comfortable, two kitchens, two bathrooms and a large television that did not get switched on once (at least not that I heard about). There, we found David and Margaret Fraser who had been the first to arrive, and the Crosslands, and we enjoyed an afternoon tea as the others began to filter in with stories about the difficulties they had in finding the place. Poor Misty, the little white terrier of Ann and Gid Frengly, was most perturbed by the free-roaming of pigs around our car park and by the sudden flurries of barking that Dave Fraser would give off in her presence.

That evening was a good time to catch up with everybody as we had members from Mahia, Whakatane, Christchurch, Nelson and Wellington who wouldn't so often get together but for shell shows and trips like this so we had many stories to hear and tell. This, I believe, is the best part about Club trips such as this one: the people and the conversations. Indeed Gid and Dave's fish stories were getting harder and harder to believe and Derrick went in there with a tale about a captain who had once hooked up a lantern with the candle still going. With the scoffs of those listening, he offered to put out the candle in the story in exchange for a couple of feet knocked of the fish in the tales of the others.

We had light rain that evening but were otherwise blessed with a clear run for much of the rest of the trip. Sure enough, the next day was fine and we took a convoy of cars out to the East Cape lighthouse and Te Awaroa. I rode with the Frasers this time and again received a grand tour. Just as Derrick had done some electrical work for every house on the way to Waihau Bay, the Frasers it seemed, had stayed in just about every roadside farmhouse along our route in their work for DoC and seemed to know the area fairly well.

Our first stop was the shellsand at Te Awaroa where I found *Volutomitra obscura*, *Maoricrypta youngi*, and attractive but small specimens of brilliantly golden *Cellana flava*. I was most upset at only finding broken specimens of *Cominella tolagaensis* which was one of my target species for this trip. Onwards towards the lighthouse, we dropped a few people off at the beach just before the road goes inland towards the lighthouse carpark. Then we climbed to the lighthouse to be greeted with stunning views of East Island and the surrounds and historical notes about shipwrecks and the birds on the Island where the Frasers had stayed for a period of time working for DoC.

We ambled back down the hill enjoying what we felt was probably the last taste we would get of summer, and drove to where we had dropped off people at the beach to have a cruised lunch. I noticed Jenny Raven signalling to me from the distance over on the inter-tidal papa platforms about 326m down the beach and I walked over to see what all the fuss was about to where she had a bag full of hermit crabbed *Cominella tolagaensis*, *Buccinulum colensoi* (now regarded as a form of *vitattum* I believe) and *Buccinulum fuscozonatum*. Cursing my casual lunch, I raced out as far as I could go into the incoming tide and after much searching in the small cracks in the mudstone I found four *Cominella tolagaensis* (one quite nice), two beautiful *Buccinulum colensoi*, several nice live *Paratrophon quoyi* and a small *Antimelatoma buchanani maorum*. Species-wise, the others found much the same with Derrick finding a small *Calliostoma osbornei* as well.

The East Cape area is one where the warmer northern currents meet up with cooler waters from the south so the southern limit for many 'northern' shells can be found here; making for very interesting shelling indeed.

The next day was the first of two planned for dredging with a charter boat organised by Derrick. We arrived to find the boat's master shaking his head at the whitecaps and agreed to come back in the afternoon when it should have calmed down. A group of us walked out to the point at the North end of the Waihau Bay township. Along the walk Bert and I each found a large *Bulla quoyii*, Gid and I each found a nice *Cantharidus opalus*, Bert found a *Trivia merces*, I found a purple *Charonia lampas* and Derrick found a nice *Semicassis labiata*; all hidden in the rocks on what was a fairly dull looking beach otherwise. Back at the pier (which starred in the film 'Boy') were two young Maori kids fishing happily and our boat, now ready to go out in the (calmer!!?) bay.

As ever, we gathered eagerly to the side of the boat as the first dredging run was pulled in. As Douglas Adams would say, at first we saw nothing but then, after a second or two, we continued to see nothing. Empty. I am ashamed to say that afterwards I spent much of the day leaning over the side and that the net result of all of our labours was three shells, one of which got thrown back by mistake during the sorting: A live *Neilo australis*, a live *Notocallista multistriata* (that was lost) and a nice dead *Pratulum pulchellum*: not much of a catch, although we later decided that we had been dredging on a papa seafloor as the dredge got snagged a couple of times and wasn't bringing in mud or indeed much of anything except leaves washed down the large river at the end of Whangaparoa Bay.

The next day, Jenny took a few of our group to Lottin point where they found all manner of nice things to show those of us who went out dredging again. Me, I was back on the boat and it was a beautiful day. Not calm but nowhere near as choppy as the day before. This time we had tied a small mesh insert into the dredge which made a big difference as the majority of the material we dredged up was under 10mm. We ventured further out too to where we found a sandy/muddy bottom and dredged a number of runs ranging from 20 to 100 meters depth. We didn't get any of the larger shells that we would have liked but we got a few acteons that are probably *Pupa kirki* (now synonymised with affinis in the literature), one dead but quite agreeable *Cuspidaria trailli*, a live *Maxacteon cratericulatus* and a dead *Umbraculum umbraculum* which we gave to Bruce Marshall at the National Museum. We also got a few small Nuculidae and Nuculanidae and I am told that sifting through the sand we brought back was productive for micros also.

On returning, far from stoked with our finds but pleased to have made some, we were shown a pair of the rare buccinid *Cumia reticulata* found by Ann Frengly and Marg Fraser at Lottin Point. "What! I want one of those" I said, and the next day as we drove down to Mahanga Jenny Raven and I stopped at Lottin Point so that I could have a look for one too. There I crawled on my hands and knees digging away at the gravel to get through to the shellsand underneath and by Jove did it pay off. I collected four *Clanculus peccatus*, two *Philippia lutea*, one *Serrata maoriana* (Jenny found an even nicer one!), a nice *Pictobalcis articulata*, a nice *Mitra carbonaria*, four *Buccinulum robustum*, several brilliantly coloured *Haliotis virginea crispata* and, just after I had given up and was almost at the car, I saw something a pale blue sitting on its own on the gravel beach. An absolute gem of a *Cumia*, one that is now a strong dark chocolate colour under oil. I had somehow been immensely more successful than the large group that had visited the same spot the day before, sometimes crawling through their scratch marks where they had done the same digging motion I was. Just lucky I guess and the digging worked here.

Staying in another holiday house organised by the Frasers who lived just down the road, Mahanga was a brilliant place for a shelling holiday. Whilst not covered with shells this time as historically it can be, the northern end had a large wash up out of which I pulled a *Semicassis labiata* for the Frenglys. It is obvious that after the right seas, good shells would come in there. The garden of the place we were staying at was full of sun bleached Alcithoe fusus and more *Semicassis labiata* as testament. And the Fraser's own collection of only Mahia shells was full of nice things.

The next day we spent at Auroa Point; normally a famous shelling location although I was a bit disappointed this time. A few of us found *Philippia lutea* and most of us got *Trivia* but there was little else to talk about. I found a *Semicassis labiata* with a strong yellow lip but that was nothing compared to the dark chocolate specimens from in Dave and Marg's collection from the same place. Then an unsuccessful visit to Oraka Point where, to be honest, I have never found much at all although from the records it would seem that a live *Umbraculum* had been found there in the past.

Whilst coming up with a pot luck dinner idea Dave Fraser mentioned a bag full of snapper that he had in his freezer and this we took down to the local fish and chip shop at the campground and had them fry up for us. Beautiful and fresh. Not much more to say there. Cheers Dave!

The sun rose and we waved goodbye to the Van Tiggles and Craig before Jenny Raven, the Frenglys and I went for a drive along the Mahia Township to see if someone we knew from there was home. Passing the second bay I saw something white with orange inside rolling around in the low-tide surf with a seagull pecking at it. As we didn't stop to check it must surely have been a paper nautilus as this was nautilus season and that is a well-known spot for them! I am still kicking myself for not crying out although had I done so it would have inevitable turned out to be a fish head or something else. We then walked along Opoutama Beach which can be very variable in terms of shells, often having nothing at all. It was Argonaut season but we weren't really expecting to find any so close to the Mahia settlement where the beach was littered with 4x4 tracks. We were after the nice *Semicassis labiata* that sometimes come in there and by luck we would have picked up ten or so very fresh examples coming in (some live) in the silt build-up at low tide.

Returning past the township again we saw that Bill Shortt was now home and popped in to visit. He seemed very pleased to see us and show us his incredible collection of paper nautilus, both *nodosa* and *argo* and it was good to have a catch-up. That evening Dave, Gid and I bounced along Mahanga Beach (I say we bounced; they had the front seats; I was lying in the back with the gear!) in Dave's Suzuki to go long lining with his Kontiki Seahorse. A good hour of further fishing tales and we hauled the line back in with three large gurnard on it.

The next day, before leaving, Jenny and I braved the rain to revisit Opoutama and see if more *labiata* had come in. Some had, along with three or four large but imperfect *Calliostoma tigris* (a shell more normally found on the other side of the peninsula), a live *Calliostoma punctulatum* and a live *Buccinulum* cf. *linea*.

Then it was homeward bound, driving through the rain after what I would call a very successful trip indeed. Thank you so much Jenny R. for sharing your car with me and to everybody else who came along on the trip for your company and tales. I am looking forward to the next Club trip.

Record size *Haliotis virginea virginea* Powell, 1938

by Pat Lakeman

We all have our favourite shell families and shells that we most like to find. For me these are Haliotidae and in particular, *Haliotis virginea morioria*, because if I am finding that subspecies I must be on the Chatham Islands.

Between 1997 and 2011, I have visited the Chathams four times, and on the first two occasions *H. virginea morioria* were plentiful among wash up material at Owenga and Taupeka Point in particular. On my visits in 2003 and 2011 they were considerably scarcer. In 2003 I was accompanied by Jenny Raven and Carolyn Krebs. On the very first day of that visit, strolling with a local couple along the southern end of Petre Bay near Waitangi, Jenny found the most magnificently huge, and intact, specimen of *H. virginea morioria*, half buried in the sand. It was a wonderful find - a new record size at 74mm - and yes, I was envious!

On our Chathams trip in April 2011, Graham Aamodt was as keen as I to find good *H. virginea morioria*, and we were both looking hard for them at Owenga, without much luck. Later in the trip I went alone to Taupeka Point, which had been the best locality to find them in 2003. It was a beautifully sunny and mild day, and a beautiful place to be. I really couldn't believe it when I saw, half buried in the sand, another magnificently huge, and intact, specimen of *H. virginea morioria*!

Later measurement confirmed my find as a new record size specimen – just! at 74.6mm. Between us Jenny and I now have two excellent examples of this species. Both shells are in excellent condition – surprising when we normally expect quality to vary inversely with size. Is my specimen the best shell in my collection? – well it is certainly my favourite!

Anadara trapezia (Deshayes, 1839) Family Arcidae, Subfamily Anadarinae

by Bert van Tiggele

After the school holidays this year at Langs Beach on the North Island of New Zealand, my grandchildren brought me a small bag with shell sand, also with some bigger shells in it. One of these shells was an intact, recent looking *Anadara trapezia* (Deshayes 1839). As far as I knew (Powell, 1979), there were no recent shells of Anadara found in New Zealand.

Where did this perfect looking shell come from?

Anadara trapezia is known as a sub fossil in the North of New Zealand. Possibly the species reached New Zealand during the warm phase of the Pleistocene and became extinct in a cooler period. From time to time they wash ashore. Most of them are worn.

The shell found on Langs Beach was well preserved and did not look like a fossil. Also some light was still coming through the shell.

***Andara trapezia* from Langs Beach.**

Family Arcidae
Genus Anadara Gray, 1847
Type (OD) Arca antiquate, Linnaeus, 1758
Anadara trapezia (Deshayes, 1839)
H: 29 mm, W: 38 mm,
Th: 12 mm (a single valve).
Hinge line: 29 mm

This shell is also called the Sydney mud cockle, and is still found in Australia, from Central Queensland, to Southern Victoria and Tasmania. Fossil records of the species in Australia indicate that the shell was much more wide spread during the Late Pleistocene and existed through the entire subtropical and temperate coastline of Australia (Kendrick 1990:45). It is possibly (re) introduced in New Zealand during that period.

Occurrence of *Anadara trapezia* was found in sediment of the Auckland area.

In 1985, shelly sediment associated with lava was found on the West Coast of Rangitoto Island, Hauraki Gulf. Anadaras with other shells were found in situ, in this area. They were sometimes leached but did not show signs of baking by the lava. The shells were probably moved and or locked under Rangitoto lava. Anadaras from this area are dated around 30 000 BP.

Possibly, my shell is also one of the washed out and well preserved shells from this area, washed ashore and found by my grandchildren Anna and Tom on Langs Beach, about 120 Km North/West of Rangitoto Island.

References:

POWELL, A.W.B. (1979). New Zealand Mollusca. Collins, Auckland: 500 p.

GRANT-MACKIE, J.A. & COOK, S de C. (1990). A late Quaternary *Anadara*-bearing deposit disturbed by Rangitoto Lava. *New Zealand Natural Sciences* 17: 73-79.

by Pat Lakeman

On a pleasant day in November 2010, I was lucky enough to be collecting at a favourite spot, Spirits Bay (Kapowairua) in the far north. At the high tide line near the island at the eastern end of the bay, I found a single valve of a fossil shell – with a distinctive trapezoidal shape.

As Bert records above, *Anadara trapezia* (Deshayes, 1839) is considered extinct in NZ today though as the Sydney mud cockle it lives in parts of Australia "abundantly, shallowly buried in sand or mud 'eel-grass' (*Zostera*) flats in estuaries and enclosed bays" (Beu, A.G.; Maxwell, P.A. 1990: Cenozoic Mollusca of New Zealand. *New Zealand Geological Survey Paleontological Bulletin* 58: 518 pp).

As a fossil in NZ, *Anadara trapezia* is very abundant in the fossil deposits at Kaiti Hill, Gisborne (Haweran), and described by Beu and Maxwell as "still washing ashore (very abraded) on Spirits Bay and other northern beaches, Northland." On a day when my other

finds were relatively disappointing, I was pleased that my single valve of *Anadara trapezia* reconfirmed a Beu and Maxwell observation 20 years on, and added a new record to my collection.

Notes on New Zealand Collected Species

collected by Jenny Raven

Semicassis thompsoni
(Brazier, 1875)

57mm collected by Jenny Raven at Mahanga Beach, Mahia on 3 September 2011. It was found among a washup of fresh shells on top of older shells on the far side of the stream at the northern end of the beach. It is in good condition and colour and is a new record for Mahia and southern distribution record for this species. Some *Semicassis labiatum* and *pyrum* were washed in at the same time.

Polinices simiae
(Deshayes,1838)

20mm collected by Jenny Raven on 30 August 2011 washed ashore on a gravel beach at Whanarua Bay, Eastern Bay of Penty. Te Papa records a specimen washed up at nearby Waihau Bay.

Calliostoma granti (Powell,1931)

collected by Jenny Raven among a shell washup of *Calliostma pellucidum* at the northern end of Paraparaumu beach during winter 2010. It was covered in a brown periostracum and appeared to be a *Calliostoma punctulatum* until the exterior coating was cleaned off to reveal the white shell. An unusual record for the Kapiti coast.

Cominella elegantula
(Finlay, 1926)

42mm. One of two specimens washed ashore and collected by Jenny Raven on 21 May 2011 at Waikanae beach, Kapiti coast. This is the first recorded washup in the club records of this species on this coastline. It lives below 20 metres on hard ground in Cook Strait and is known from the middle to late Pleistocene fossil record at Castlecliff, Wanganui. This one displays fresh colour and is in good condition. Known as *Cominella elegantula marlboroughensis* until recently it has now been synonimised with the fossil *Cominella elegantula.*

Hydatina physis (Linnaeus, 1758)

41mm found alive by Jenny Raven among low tide rocks and weed on the southern side of Whangamumu harbour south of Cape Brett. Live specimens are usually found much further north in Parengarenga and Rangaunu harbours. This is a remote harbour where the few visits made here indicate that some interesting shells could be living here. *Morula chaidea* were found living under rocks here in November 2002 but have not been seen on subsequent visits.

Collecting at Claverley

by Bev Elliott

During September 2010, I decided to make a checklist of shells found at Claverley, 20 kilometres south of Kaikoura. There are two kilometres of sandy beach from the end of the road at Claverley, to Okarahia, and a short rocky area at the southern end of Haumuri Bluff. So far, I have found 110 species of shells, 11 crabs and 6 starfish.

Last summer I was really enjoying the unusual amount of very low tides ... until I realised the connection between low tides and earthquakes! The 22 February earthquake in Christchurch was right on the dot, on a 0.1 low tide (Just a coincidence? I have no idea.). The March quake, with tsunami that would have devastated Kaikoura, was also predicted to coincide with a 0.1 low tide. Fortunately that one didn't happen. But I certainly lost interest in low tides and shell collecting for a while. Now we are going through a period of the poorest tides I've ever seen, 0.8 and 0.9.

Mid August brought a polar blast with snow to sea level and huge waves. Despite Civil Defence's reluctance to let the tsunami scare die down, I seem to have regained my confidence out on the beach, even when big waves are crashing ashore. So after a few days, when the weather was a little warmer, I went down to Claverley to try my luck. The huge seas had left nothing but driftwood way up the top of the beach, but they'd stirred things up, things which were now washing up at the normal high tide line.

This is always a good area for *Talochlamys zelandiae*, lovely specimens safely encased in sponges.

I slept in my van overnight, and repeated the walk next day, after which I arrived home with four shopping bags of stuff to sort through and deal with. Not all goodies, as I also picked up bits of rubbish such as net, nylon line, etc., that might be a hazard to our wildlife. I had a busy week dealing with everything, but at last it is all cleaned, sorted, listed and put away.

The latest Kaikoura Star outlines the plans for protection of the Kaikoura Coast and the deep water Canyon. Will shell collecting be allowed at all, if these plans go ahead??! Perhaps we'll need a Tsunami after all, to bring us up some deep water treasures!!

Collected species:

Haliotis iris (7); *Haliotis australis* (12); *Haliotis virginea* (2); *Calliostoma tigris* (1 broken); *Calliostoma selectum* (2 - one with operc.); *Calliostoma punctulatum* (several with operc.); *Astraea heliotropium* (several with operc. but smashed); *Cookia sulcata* (3 good with operc.); *Maoricrypta sodalis* (several inside dead univalves); *Tanea zelandica* (several); *Argobuccinum postulosum tumidum* (several with opercs.); *Austrofusus glans* (many with opercs. but smashed); Penions (3); *Amalda australis* (4); *Perna canaliculus*; *Mytilus galloprovincialis planulatus*; *Aulacomya maoriana*; *Modiolus areolatus*; *Talochlamys zelandiae* - pairs of a yellow, a purple, two red, six orange, as well as many more common mottled mauve; *Talochlamys gemmulata* (2 valves); *Ostrea chilensis*; *Cardita aoteana* (1 good); *Peronaea spenceri* (1); *Resania lanceolata* (1); *Scalpomactra scalpellum* (many single valves); *Eudoxochiton nobilis* (a tiny perfect 21mm specimen); *Icoplax empleura* (1, 22mm); *Cryptoconchus porosus* (6).

Starfish: *Patiriella regularis* 7 arms (1), 6 arms (8), 5 arms (many), 4 arms (2); *Pentagonaster pulchellus* (several); *Allostichaster insignis* (2); *Asterodon dilatatus* (several); *Asterodon miliaris* (several).

Colantica villosa - Hairy Goose Barnacle (common); *Terebratella inconspicua* - small red Lamp Shell (many); *Boltenia pachydermatina* - Sea Tulip (many); *Lepidonotus giganteus* - Sea Mouse (1); *Caudina coriacea* - Tailed Sea Cucumber (several); Egg Cases of *Callorhynichus milii* - Elephant Fish and *Raja nasutu* - Skate; Leather Jacket (2); and a small Shark or Dogfish.

Colour Variations in New Zealand Shells

by Jenny Raven

Over many years of shell collecting I have occasionally come across some unusual colour varieties. This may be due to what the shell is living on or changes in its natural pigmentation. The families most affected in this way appear to be the Muricids, particularly the rock shells and the Buccinids, particularly Cominella. Attached are some pictures of the shells I have found showing the normal and abnormal colouration.

White Rock Shell, *Dicathais orbita,* dark colour variant from rocks, east end of Lyall Bay beach, Wellington (near airport outfall).

Cominella glandiformis, orange variant from shallow tidal pool containing rock oysters, Russell.

Dark Rock Shell, *Haustrum haustorium*, yellow variant from Palmer Head, Wellington

Cominella maculosa, orange variant from rock pool north of Fire Station, Plimmerton, Wellington.

Paratrophon patens, orange variant with normal blue–grey specimen from the same rock Native Island, Stewart Island.

Paratrophon quoyi, orange variant from Karikari Beach, Northland.

Mytilus galloprovincialis planulatus, light coloured variant with normal blue specimen from rocks along the breakwater at Caroline Bay, Timaru.

After Land Snails in Cuba

by Pete Creswell

Feeling conchologically jaded?

A little tired of the same old, same old?

Think your fieldwork needs a boost?

Think Cuba!

Arguably one of the richest countries in the world for land snails, Cuba boasts no less than 1,300 accepted species. Innumerable sub-species and forms are inevitable, given the staggering range of colors that are evident in many species groups. *Polymita*, for example, with six species and 15 subspecies, was, by some earlier workers, further sub-divided into a bewildering number of color forms. Many have already been eliminated by synonymy and, doubtless, more will eventually follow. The same processes were applied to the genus *Liguus*.

On the flipside, there are many groups, presently with relatively few species, which will inevitably undergo species expansion with more study, using dna sequencing and other modern techniques.

***Plaesospira echinus* - all of 7mm long.**

[Photo courtesy of Ms Norvis Hermandez, PhD student of Baracoa, Cuba]

As expected, much of the original vegetation has been destroyed, particularly in lowland areas where agriculture and horticulture has severely compromised snail habitats. Even the untouched, spectacular and species-rich magotes of Pinar del Rio in the north-west are under threat. These "magotes" – a Cuban name for the limestone outcrops reaching up to 300m – are the remnants of tertiary seismic uplifting. Millennia of erosion reduced the surrounding area to sandy plains. The natural vegetation, particularly near their bases, compromised by woodcutting, thick grassland vegetation removal and domestic animals has severely reduced the tree-dwelling populations of the Orthalicid snail *Liguus flammellus* Clench, 1934. Sadly, this combination has reduced *Liguus* numbers in other parts of Cuba.

Not to dwell too long on this negative note, it is obvious that populations of other snails, particularly various *Viana* and *Emoda* species, are flourishing, low down, on the near vertical, rough, limestone faces. These attractively coloured snails, may be magote/species specific or, at least there appears to be a high correlation between color forms and particular magotes. Much smaller and even more spectacular was the tiny Annularid, *Plaesospira echinus* (Wright & Pfeiffer, 1862) – hiding, during dry periods, in the many deep holes littering the magote surfaces.

A general view of the Vinales Valley, showing various magotes amongst fertile cropping land.

At the base of the walls, under deep litter and limestone rocks were a great number of snails. Most were dead, still in excellent condition and had clearly fallen from above, while others were litter dwellers. Various Annularids, particularly the genera *Rhytidothyra, Chondrothyra* and *Rhytidopoma* were well represented. A litter and soil sample yielded many, minute species, which will present a real nomenclatural challenge! For a range of photos, go to www.malak.com and follow the prompts to Cuban Cabinet.

The proliferation of snails in this part of Cuba is not confined to the higher magotes. We came across a population of *Urocoptis vignalensis* (Wright, 1864) on a large boulder amongst roadside grasses. In other places we would stop to take pictures, or just stretch our legs. A quick scratch under any vegetation invariably turned up new snail species.

One of the 'musts' for land snail collecting in the Caribbean are *Cerions* – those peanut-like snails that inhabit both coastal scrub and supra-littoral rocks near shorelines, within the influence of salt spray, are represented throughout the region (although there are some notable exceptions: for example Jamaica). Cuba boasts 153 species, according to the Smithsonian Institute. They can be very difficult to correctly identify from shell characters – with their high morphological variation. In some favoured localities the species count can be quite high. By no means outstanding was our collection of five species from Gibora beach, Holguin District. Other areas yielded only a single, although usually prolific, species. Unfortunately for us, there are areas in Cuba which are out-of-bounds to visitors, (and, in many cases, also locals) including coastlines with high *Cerion* potential. The army uses some otherwise unproductive areas of rural Cuba. Perhaps, on a positive note, with collectors and scavengers kept out, colonies are afforded good protection.

To Cuba's credit, there are significant areas designated as parks or wildlife reserves. National parks number nine, with an additional six biosphere reserves. Given that Cuba's land mass is slightly less than the North Island of New Zealand, while its largely rural population is over 11 million, it seems a creditable conservation effort. Access in parks and reserves is usually by way of a prescribed fee, but revenues appear to be well spent on park maintenance. Just how effective these areas are in preserving particular flora and fauna is difficult to tell. Insofar as land molluscs are concerned, the government recognized decades ago that the sale of *Polymita* had to be stopped in the interests of conservation. They are now protected by statute. In many places, especially in rural areas near *Polymita* habitats where visitors may be expected to be exposed to them, there are signs warning against temptation. Not all is gloomy for the beautiful *Polymita*. Extraordinarily, and against all expectations, they are doing well in coffee plantations. A parallel to this might well be the way in which the Melanesian genus *Papuina* has adapted to thriving on plantation cocoa trees. But, I did leave Cuba with two empty *Polymita* shells – from 'farmed' stocks and presented to me by an authorized biological researcher.

Having mentioned molluscan environmental adaptation, another species in Cuba seems to be equally thriving on all manner of surfaces – including painted walls and bitumen coated surfaces At Baracoa, dozens of these attractive snails, after a shower, happily wandered round a small herbaceous garden's walls while we enjoyed lunch.

Camnaeid snail *Caracolus rostrata* (Pfeiffer, 1847) quite comfortable on a bitumen wall.

With freshwater molluscs being of equal interest, I was disappointed to note that many invasive species had pushed out endemic species. Pointier, Young and Gutierrez "Guide to the Freshwater Molluscs of Cuba,", Conchbooks, Hackenheim 2005 listed 42 taxa including a number of invasive species, such as the Thiarid, *Tarebia granifera* (Lamarck, 1816). The authors indicated known species distribution. Wherever practical, we made diligent searches for freshwater material and were disappointed to find the invasive species had spread well beyond the parameters indicated by these authors. Furthermore, the same searches failed to turn up native species where they had been previously recorded and could reasonably be expected to be found. Clearly, there has been a marked deterioration in the distribution of Cuban freshwater molluscs.

Cuban waterways, generally quite small, are subject to seasonal dry spells and thus would be quite susceptible to natural climatic changes. As expected, and in common with other countries, environmental changes beyond the natural ebbs and flows can be attributed to human activities bringing about a reduction of water quality and general habitat degradation.

So, would Cuba figure on your radar? It's a very peaceful country, enjoys visitors, can accept non-Spanish speakers with a smile and has much to offer, even if you've no interest in molluscs. It would have to rank as the most fascinating country we've ever visited.

Oh yes. The marine environment. Well, it's typically Caribbean. Has clean, uncluttered beaches. No obvious pollution, but given the extraordinary land material, who'd want to go there?

Notes on Buccinulidae and Buccinidae

by Pat Lakeman

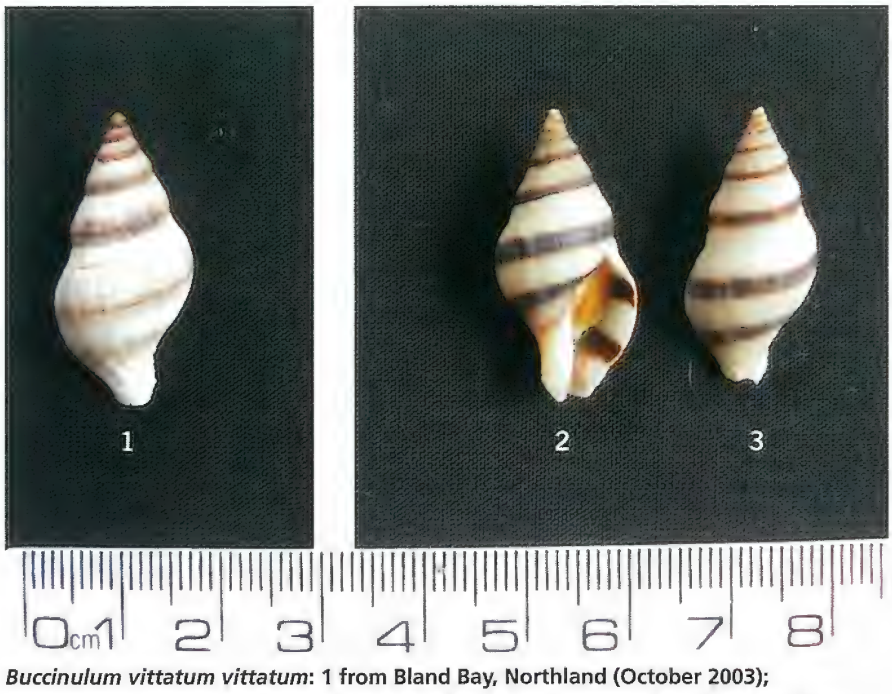
The Wellington Shell Club's meeting in March 2011 was held at the home of Deirdre Standish and focussed on the family Buccinidae. Jenny Raven and Pat Lakeman brought a large selection of specimens to view and compare. By chance the Auckland Shell Club also chose Buccinidae as their topic for March, which Peter Poortman presented, and Peter has kindly supplied his notes which have been incorporated into this article. Many thanks to Peter and also to Alan Beu and Bruce Marshall for their help with this story.

***Buccinulum linea*: 1, 2, 3 from Bland Bay, Northland (July 2010); 4 from Titahi Bay, Wellington (April 1990); 5 from Waitangi, Chatham Islands (December 2003).**

In the NZ Checklist[1] as it was at March 2011, Buccinidae appeared as a family with two subfamilies, Buccininae and Pisaniinae, containing 69 species in 21 genera and subgenera. Subsequently the Checklist has incorporated the family Buccinulidae for the NZ species formerly referred to Buccininae, following the work by Harasewych and Kantor[2] published in 2004. Hence the renaming of this article to cover predominantly Buccinulidae, since there are now only three NZ species within Buccinidae, all of which are found only around the Kermadec Islands.

Worldwide, Buccinidae is one of the most successful gastropod families, and representatives flourish in all seas from the Arctic to the Antarctic, and from tidal waters to ocean deeps. Some are active carnivores, but most are scavengers feeding on dead animal matter. Their reproductive strategy of direct development means that neighbouring populations have little genetic contact. This enhances genetic isolation, which leads to relatively rapid evolutionary divergence within the family.

For the majority of Buccinulidae/Buccinidae species found in NZ waters – most of which are endemic - Powell[3] is still the major source of published work. There are 19 published papers relevant to Buccinulidae/Buccinidae currently in the literature cited in the Checklist,



***Buccinulum vittatum vittatum*: 1 from Bland Bay, Northland (October 2003); *Buccinulum vittatum bicinctum*: 2, 3 from Okawa Bay, Chatham Islands (March 1997).**

[1] Spencer, H.G., R.C. Willan, B. Marshall & T.J. Murray. 2011. Checklist of the Recent Mollusca recorded from the New Zealand Exclusive Economic Zone.

[2] Harasewych, M.G. & Kantor, Yu. I., 2004. The deep-sea Buccinidae (Gastropoda: Neogastropoda) of the Scotia Arc and adjacent abyssal plains and trenches. The Nautilus 118: 1-42.

[3] Powell, A.W.B. 1979. New Zealand Mollusca: Marine, Land and Freshwater Shells. Collins, Auckland. 500 Pp.

but relatively few of these impact at species level. Taxonomic work at higher levels, however, has been more extensive, with the result that, since 1995:

- Subfamily Fasciolariinae has regained family status as Fasciolariidae (includes genera *Fusinus*, *Glaphyrina*, *Microfulgur* (now in Turbinellidae), and *Taron*);
- Subfamily Nassariinae has been elevated to family status as Nassariidae (genus *Nassarius*)
- Genera *Cumia* (was *Ratifusus*) and *Iredalula* have been moved to the family Colubrariidae;
- *Cryptofusus cryptocarinata* Dell, 1956, formerly in *Pleia*, has been transferred to Turbinellidae;

and as referred to above, Subfamily Buccininae has been elevated to Buccinulidae.

Of the 69 NZ species in Buccinulidae/Buccinidae, 3 species are Buccinidae and 66 are Buccinulidae. The 52 Buccinulidae species are grouped in 4 genera – *Aeneator* (9 species), *Buccinulum* (12), *Cominella* (24), and *Penion* (7), and all of these species are endemic. Many of these shells are readily collectible and so are well known to collectors (if not always easy to correctly identify – see discussion of Buccinulum below). Also familiar is *Austrofusus glans*, one of two species in the genus *Austrofusus*). Our *Austrofusus*, *Buccinulum*, *Cominella* and *Penion* species (except *P. benthicola*) are all found in shallow waters.

The other 7 genera in Buccinulidae (*Antarctodomus*, *Belomitra*, *Eosipho*, *Euthrenopsis*, *Nassaria*, *Pareuthria*, and *Phos*), and *Cantharus* and *Pisania* in Buccinidae, contain 1-3 species each, and also contain the 9 non-endemic species found in NZ waters. Some are restricted to the Kermadecs (*Phos*, *Cantharus* and *Pisania*) and none are commented on further here except insofar as I have included a list of all the publications relevant to Buccinidae that are currently cited in the Checklist.

For Wellington collectors the most accessible *Aeneator* species is *A. otagoensis*, which although not common is regularly found washed up on Kapiti Coast beaches. *A. benthicola* inhabits deeper water, and is also uncommon, but has been sourced from trawlers (eg operating off Bay of Plenty). Jenny was able to show us some rarer *Aeneator* species including a very handsome, pink, *A. recens* trawled off the Wairarapa coast at 250-500m depth.

The genus Buccinulum (pronounced Book-Sin-Ulum) provides the most challenges to collectors in terms of identification. Powell put it succinctly when speaking of the Buccinulum complex as a whole: "Variation in sculpture and in colouration is excessive, even within species." In particular, Bruce Marshall advises that regardng *Buccinulum linea*, *B. pallidum* and *B. vittatum*, it is almost impossible to determine them from their colour variations/patterns, because all 3 occur with the same variations.

In general, *B. vittatum* is smaller and more slender than the other two. Bruce recommends using the protoconch as the key to differentiating between them – the protoconch of *B. linea* is larger than that of *B. vittatum*, and the protoconch of *B. pallidum* is larger again.

In 1989, Dave Gibbs[4] wrote of collecting (including *Buccinulum* and

Species	Geographic range	Characteristics
B. linea	North, South and Chatham Islands	Moderate size (ave height 40mm); usually smooth but can be spirally lirate and weakly axially costate; some (deep water) forms are strongly sculptured. Capacious body whorl. Short twisted recurved anterior canal. Smooth lip.
B. fuscozonatum	North Island east coast from East Cape to Castlepoint	Medium size (ave ht 31mm); coarse sculpture with regular strong axial folds, dentate lip and parietal tubercle.
B. pallidum pallidum	From Mahia south and Chatham Islands	Tall and narrowly fusiform (ave ht. 43mm). Surface dulled by fine spiral lirations. Short almost straight anterior canal.
B. pallidum powelli	Northland to East Cape	Smooth and shining. Whitish with a pale purple tinge with conspicuous spiral lines in dark brown.
B. pertinax pertinax	From Otago south, and Chatham Islands	Typically large, broadly fusiform (ave ht. 43mm). Often but not always with capacious body whorl. Narrow, scarcely raised spiral cords, with weak axials usually only on spire whorls. Short twisted anterior canal.
B. pertinax finlayi	Cook Strait and South Island off Banks Peninsula, Otago and Fiordland	Axial folds over all but last whorl; strong regular spiral cords.
B. vittatum vittatum	North, South, Stewart and Chatham Islands	Small to medium sized fusiform shell (ave ht. 22mm).
B. vittatum bicinctum	Chatham Islands	Taller spired and mostly larger than *B. vittatum vittatum*. Almost invariably the aperture lacks teeth.

[4] Gibbs, Dave, 1989. Mahia Peninsula. In Poirieria Vol 15 no 5, Auckland Shell Club.

Cominella species) at Mahia Peninsula, and an accompanying photograph shows extensive variation of both colour pattern and sculpture in subtidal *Buccinulum*, particularly *B. linea* from islands in the Hauraki Gulf. In the NMNZ collection, there are some very strongly sculptured deep water forms of *B. linea* from off the Poor Knights Islands.

The Visual Guide[5] states that *B. linea* has a smooth lip and no tubercle at the top of the aperture, whereas this tubercle is present in *B. pallidum*. However coauthor Jenny Raven advises that these references to tubercles are in error, being a misinterpretation of Powell's work.

Buccinulum pallidum is currently divided into 2 subspecies, but Bruce has suggested that future work might reveal *B. pallidum powelli* (current distribution being localities north of East Cape) to be either a local form of *B. pallidum pallidum* (current distribution being to localities south of East Cape) or a separate species in its own right (i.e. *B. powelli*) with distribution of northern North Island.

B. pertinax is generally referred to as occurring from Otago south and at the Chatham Islands, but the NMNZ contains forms of *B. pertinax* from localities as far north as Cook Strait. It often has a more bulbous body than *B. pallidum*, but the shape of the last whorl won't work for all populations. In 1987, Dave Gibbs[6] dived in Fiordland and found tall spired, narrow examples of what he concluded were *B. pertinax finlayi*. These are now in the NMNZ collection, and they are narrower than the average *B. pallidum*. Bruce Marshall regards the axial sculpture as a good clue to the identification of *B. pertinax*, and he hasn't yet checked protoconch size as an indicator for this species.

Bruce also advises that *B. vittatum* and *B. colensoi* are the same species, based on analysis of DNA which is identical. *B. vittatum bicinctum* (distribution restricted to the Chatham Islands) may prove to be the same as *B. vittatum vittatum* or a separate species in its own right – DNA analysis is needed to determine this.

Having regard to all of the above, potentially useful features - mostly ignoring colour and pattern, but possibly paying too much attention to sculpture! - are set out in the table accompanying this article.

Collectors often find that some *Buccinulum* species can be confused with members of other families: for example, *B. mariae* with *Murexsul mariae*, and *B.vittatum* with *Taron dubius*.

The genus *Austrofusus* contains two endemic species – *A. glans* which is found throughout NZ and is abundant on Kapiti Coast beaches, and *A. chathamensis* which is found around Cook Strait and at the Chatham Islands. The latter, as described by Powell "has very numerous axial ribs that extend from suture to suture, overridden by equally numerous sharply raised spiral cords, but tubercular keels are entirely lacking". At our March Club meeting, we were able to see that a specimen from Marfells Beach looks distinctly different from typical *A. glans*. However, Beu and Maxwell[7] note that specimens of *A. glans* which are "indistinguishable from Chatham Is. specimens of *A. chathamensis* wash ashore on Wellington beaches not uncommonly, intergrading with the variably nodulose specimens of *A. glans*" and "it seems very likely that *A. chathamensis* is part of the variation of *A. glans*.

At the meeting we were able to view the majority of the 24 endemic *Cominella* species, from the range that Jenny and Pat brought along. Several species in this genus are common and well known to collectors. Two particularly fine *Cominella virgata virgata* were on display having been found at Seatoun, Wellington, on a club field trip in 1991. Some of the rarer, deep water species were also available for inspection as well as several species which have limited distributions including *Cominella nassoides nodicincta* from the NZ subantarctic islands, *C. nassoides iredalei* from Chatham Is. and *Cominella regalis* from Three Kings Is. More recently this year, Jenny has found two specimens of the rarely found *Cominella elegantula* at Waikanae, and that is reported elsewhere in this edition of *Cookia*.

The genus *Penion* contains 7 endemic species and at least one example of each was brought to our meeting. The only common species among them is *Penion sulcatus*, which inhabits shallow waters and is therefore readily found by collectors. When viewed in larger numbers, such as in the NMNZ collection, some *Penion* species appear to intergrade.

There is clearly plenty of potential for further work in Buccinulidae! Despite the puzzle of identifying some of our finds, it is a great family to collect - many species can be found quite readily, and some of the less common species do turn up either in particular locations (such as Mahia Peninsula for *Buccinulum fuscozonatum*) or just often enough to keep us looking (such as *Aeneator otagoensis* on the Kapiti Coast). I have collected some beautiful specimens from some of my favourite localities (Bland Bay, Stewart Island, Chatham Island) and while I may not always know exactly what I am finding, they are still a joy to discover.

---

[5] Raven, Jenny & Bracegirdle, Selwyn, 2010. New Zealand Seashells Visual Guide. Creatus Design.
[6] Gibbs, Dave, 1989. Notes on Some Buccinulum from Fiordland. In *Poirieria*, Vol 15 no 6, Auckland Shell Club.
[7] Bu17: Beu, A.G.; Maxwell, P.A. 1990: Cenozoic Mollusca of New Zealand. *New Zealand Geological Survey Paleontological Bulletin* 58: 518 Pp.

References in the August 2011 Checklist re Buccinulidae/Buccinidae (in order of appearance):

Bu29: Beu, A.G. 2011: Marine Mollusca of isotope stages of the last 2 million years in New Zealand. Part 4. Gastropoda (Ptenoglossa, Neogastropoda, Heterobranchia). *Journal of the Royal Society of New Zealand* 41: 1-153.

P1: Powell, A.W.B. 1979: *New Zealand Mollusca: Marine, Land and Freshwater Shells.* Collins, Auckland. 500 Pp.

Mor2: Morley, M.S.; Hayward, B.W.; Raven, J.L.; Foreman, G.A.; Grenfell, H.R. 2006: Intertidal and shallow subtital biota of Mahia Peninsula, Hawkes Bay. *Records of the Auckland Museum* 43: 11-41. (Re *Aeneator comptus*, *Buccinulum fuscozonatum*, *Cominella quoyana quoyana* & *Cominella virgata brookesi*.)

Dl2: Dell, R.K. 1978: Additions to the New Zealand Recent molluscan fauna with notes on *Pachymelon* (*Palomelon*). *National Museum of New Zealand Records* 1: 161-175. (Re *Aeneator elegans*.)

Dl5: Dell, R.K. 1996: New species and records of deep-water Mollusca from off New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 2: 1-26. (Re *Antarctodomus powelli* & *Penion benthicolus*.)

Bu26: Beu, A.G; Marshall, B.A. 2010: *Austrofusus* Kobelt, 1879 replaced by *Aethocola* Iredale, 1915 in New Zealand (Mollusca: Gastropoda: Buccinulidae). *Molluscan Research* 30: 53-55.

Bu30: Beu, A.G.; Marshall, B.A. 2011: Retraction: *Austrofusus glans* (Röding, 1798) is the type species of *Austrofusus* Kobelt, 1879 (Gastropoda: Buccinulidae). *Molluscan Research* 31: 61-62.

Bu17: Beu, A.G.; Maxwell, P.A. 1990: Cenozoic Mollusca of New Zealand. *New Zealand Geological Survey Paleontological Bulletin* 58: 518 Pp. (Re *Austrofusus chathamensis*, *Buccinulum linea*, & *Cominella tolagaensis*.)

Bo5: Bouchet, P.; Warén, A. 1985: Mollusca Gastropoda: Taxonomical notes on tropical deep water Buccinidae with descriptions of new taxa. *Mémoires du Muséum National d'Histoire Naturelle, Série A. Zoologie* 133: 457-499. (Re *Belomitra climacella* & *Eosipho aldermenensis*.)

Bo4: Bouchet, P.; Warén, A. 1985: Revision of the Northeast Atlantic bathyal and abyssal Neogastropoda, excluding Turridae (Mollusca, Gastropoda). *Bollettino Malacologico Supplement* 1: 123-296. (Re *Belomitra climacella*)

Bu1: Beu, A.G.; Cernohorsky, W.O.; Climo, F.M.; Dell, R.K.; Fleming, C.A.; Marshall, B.A.; Maxwell, P.A.; Ponder, W.F.; Powell, A.W.B. 1976: A neotype for *Buccinum linea* Martyn, 1784 (Mollusca, Buccinidae). *Journal of the Royal Society of New Zealand* 6: 221-225. (Re *Buccinulum linea*.)

Hj1: Hayashi, S. 2005: The molecular phylogeny of the Buccinidae (Caenogastropoda: Neogastropoda) as inferred from the complete mitochondrial 16S rRNA gene sequences of selected representatives. *Molluscan Research* 25: 85-98. (Re *Buccinulum linea*, *Cominella adspersa*, *Penion chathamensis* & *Penion sulcatus*.)

Mr40: Marshall, B.A. 1998: Marine Mollusca from Wellington Harbour and approaches. Eastbourne, New Zealand, East Harbour Environmental Association Inc. Pp 145-155. (Re *Buccinulum vittatum vittatum*.)

Wl3: Willan, R.C. 1978: The molluscan genus *Cominella* (Gastropoda: Buccinidae) at the Three Kings Islands. *New Zealand Journal of Zoology* 5: 437-443. (Re *Cominella quoyana griseicalx*, & *Cominella regalis*.)

Cy10: Cernohorsky, W.O. 1982: The taxonomy of some Indo-Pacific Mollusca Part 10. *Records of the Auckland Institute and Museum* 19: 125-147. (Re *Nassaria* cf. *problematica*.)

Cy9: Cernohorsky, W.O. 1981: The family Buccinidae: Part 1 The genera *Nassaria, Trajana* and *Neoteron. Monographs of Marine Mollusca* 2: 1-52. (Re *Nassaria solida* & *N. spinigera*.)

Pr1: Ponder, W.F. 1975: Identity of *Penion dilatatus* (Quoy and Gaimard, 1833) (Mollusca: Buccinidae). *New Zealand Journal of Marine and Freshwater Research* 9: 569-571. (Re *Penion cuvierianus cuvierianus* & *P. sulcatus*.)

Cy5: Cernohorsky, W.O. 1978: New records of neogastropod Mollusca from the Kermadec Islands. *Records of the Auckland Institute and Museum* 15: 55-65. (Re *Phos hirasei*.)

Ba1: Brook, F.J.; Marshall, B.A. 1998: Appendix: Checklist of benthic coastal marine chitons, bivalves, gastropods and cephalopods of the northern Kermadec Islands. Pages 210-233 in Brook, F.J. 1998: The coastal molluscan fauna of the northern Kermadec Islands, southwest Pacific Ocean. *Journal of the Royal Society of New Zealand* 28: 185-233. (Re *Phos textilis*, *Cantharus spica*, *C. isotomus* & *Pisania hedleyi*.)

Wellington Shell Club 2010-2011

President: Jenny Raven

Vice Presidents: Doreen Burr, Selwyn Bracegirdle

Secretary: Deirdre Standish • Email: deirdre.standish@clear.net.nz • Telephone 04 904 1080

Treasurer: Jenny Walton • PO Box 40685, Upper Hutt • Telephone 528 5618

Editor: Selwyn Bracegirdle • 7 Astor Street, Karori, Wellington • Email: creatus@paradise.net.nz • Telephone: 973 9410

Newsletter: Jill Burnet • 84 Brougham Street, Mt Victoria, Wellington • Telephone: 384 7418

Librarian: Pat Lakeman

Sales table and raffles: Kris Woods

Website: Jenny Walton • http://www.wellingtonshellclub.org.nz

2011 Membership Fees: Single $15 • Family $20 • Overseas $30

Cookia Contributions

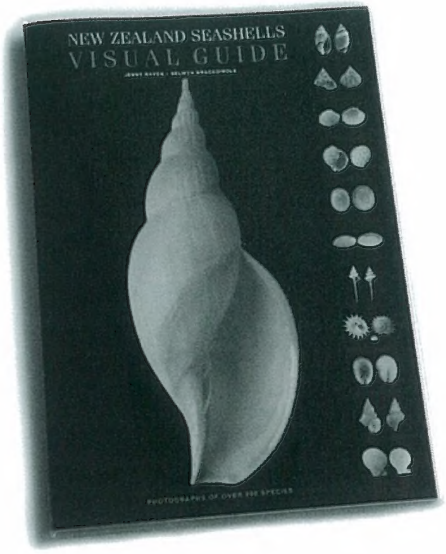
Members and other readers are invited to submit contributions (handwritten, typed or electronic) but, preferably, these should be in the Editor's hand before the end of May for inclusion in that year's issue (look at a recent issue to see the style to follow).

Please use (unless there is a stated reason not to do so given in your manuscript) the molluscan names in the Checklist of New Zealand Living Mollusca by Spencer, H.G., Willan R.C., Marshall B.A., and Murray T.J., which can be viewed at

http://www.molluscs.otago.ac.nz/index.html

Authors should also save the editor work by checking the spelling of these names very carefully. Following standard practice, in long lists of species the species names should NOT be listed in alphabetical order but in systematic sequence (with Family headings) as in the 'Checklist'. Bruce Marshall, at the Museum of New Zealand Te Papa Tongarewa, is very willing to check identifications or species names for any members who would like his help. Please take advantage of this generous offer. Also note: the Mollusca Section library at the Museum of New Zealand Te Papa Tongarewa is the most comprehensive collection of the world literature on Mollusca in the country.

The Editor is always happy to discuss proposed contributions with members.



New Zealand Seashells Visual Guide
Available in New Zealand NZ$89.90 (incl post)
To Australia NZ$99.90 (incl post)
To other countries NZ$109.90 (incl post)

Available from Selwyn Bracegirdle
creatus@paradise.net.nz (PayPal accepted)
or the publisher Creatus Design
PO Box 17034, Karori, Wellington 6012, New Zealand

Wellington Shell Club Publications

Cookia is the journal of the Wellington Shell Club and is published annually, containing articles and smaller items of interest on shells, shell collecting, and molluscs as well as other related marine topics.

Cookia was first published in 1976; prior to this the Club published a *Circular*, then a *Bulletin*, as well as occassional *Study Notes* on various families of Mollusca.

PUBLICATIONS TO DATE

1956–1965 *Circular* 1 to 21
1967–1975 *Bulletin* 1 to 36
1976–1977 *Cookia* Volume 1, Nos 1, 2, 3
1977–1978 *Cookia* Volume 2, Nos 1, 2, 3
1979–1980 *Cookia* Volume 3, Nos 1, 2, 3
1980–1981 *Cookia* Volume 4, Nos 1, 2, 3
1982–1984 *Cookia* Volume 5, Nos 1, 2, 3, 4
1985–1992 *Cookia* Volume 6, Nos 1, 2, 3, 4
1993–1996 *Cookia* Volume 7, Nos 1, 2, 3, 4 [Index]
1997 *Cookia* Volume 8
1998 *Cookia* Volume 9
1999 *Cookia* Volume 10
2000 *Cookia* Volume 11
2001 *Cookia* Volume 12
2002 *Cookia* Volume 13
2003 *Cookia* Volume 14 [The Shell Lists]
2003 *Cookia* Volume 15
2004 *Cookia* Volume 16
2005 *Cookia* Volume 17
2006 *Cookia* Volume 18
2007 *Cookia* Volume 19
2008 *Cookia* Volume 20
2009 *Cookia* Volume 21
2010 *Cookia* Volume 22
(*Cookia* Volume 7, No 4, is an index of all articles in the Club's publications to 1996)

BACK ISSUES

Back issues of *Cookia* are available at cost plus postage; individual articles, and copies of the Bulletins, Circulars and Study Notes can be ordered at 10c per page plus postage, from Jill Burnet, 84 Brougham Street, Mt Victoria, Wellington, New Zealand; or see our homepage at **www.wellingtonshellclub.org.nz**

ALL FOR ONE – HOW WELL DO YOU KNOW THE SHELL? ANSWER

Alcithoe arabica

All for one – how well do you know the shell?

Which New Zealand species is featured here - multiple specimens shown. Answer on page twenty eight.